

Refine Search

Search Results -

Term	Documents
MANOLAGAS-STAVOROS-C	0
MANOLAGAS-STAVOROS-CS	0
MANOLAGAS-STAVOROS-C.IN..PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	0
(MANOLAGAS-STAVOROS-C.IN.).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	0

Database:

US Pre-Grant Publication Full-Text Database
 US Patents Full-Text Database
 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Search:

L6

Refine Search

Recall Text

Clear

Interrupt

Search History

DATE: Monday, May 03, 2004 [Printable Copy](#) [Create Case](#)

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
<u>L6</u>	manolagas-stavoros-c.in.	0	<u>L6</u>
<u>L5</u>	sousteni-stavoula.in.	0	<u>L5</u>
<u>L4</u>	sousteni-stavoula.in.	0	<u>L4</u>
<u>L3</u>	L2 and l1	3	<u>L3</u>
<u>L2</u>	steroid receptor	1758	<u>L2</u>
<u>L1</u>	genotropic	4	<u>L1</u>

END OF SEARCH HISTORY

FILE 'MEDLINE'
FILE 'JAPIO'
FILE 'BIOSIS'
FILE 'SCISEARCH'
FILE 'WPIDS'
FILE 'CAPLUS'
FILE 'EMBASE'
=> S STEROID RECEPTOR#
L1 26518 STEROID RECEPTOR#

=> L1 AND GENOTROPIC
L2 18 L1 AND GENOTROPIC

=> DUP REM L2
PROCESSING COMPLETED FOR L2
L3 7 DUP REM L2 (11 DUPLICATES REMOVED)

=> D L3 IBIB ABS 1-7

L3 ANSWER 1 OF 7 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2003257191 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12782668
TITLE: Kinase-mediated regulation of common transcription factors
accounts for the bone-protective effects of sex steroids.
COMMENT: Comment in: J Clin Invest. 2003 Jun;111(11):1641-3. PubMed
ID: 12782664
AUTHOR: Kousteni Stavroula; Han Li; Chen Jin-Ran; Almeida Maria;
Plotkin Lilian I; Bellido Teresita; Manolagas Stavros C
CORPORATE SOURCE: Division of Endocrinology and Metabolism, Center for
Osteoporosis and Metabolic Bone Diseases, University of
Arkansas for Medical Sciences, Little Rock, Arkansas, USA.
CONTRACT NUMBER: K02-AR02127 (NIAMS)
P01-AG13918 (NIA)
SOURCE: Journal of clinical investigation, (2003 Jun) 111 (11)
1651-64.
Journal code: 7802877. ISSN: 0021-9738.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200307
ENTRY DATE: Entered STN: 20030604
Last Updated on STN: 20030713
Entered Medline: 20030711

AB It has been found that 4-estren-3alpha,17beta-diol, a synthetic ligand for
the estrogen receptor (ER) or androgen receptor (AR), which does not
affect classical transcription, reverses bone loss in ovariectomized
females or orchidectomized males without affecting the uterus or seminal
vesicles, demonstrating that the classical ***genotropic*** actions of
sex ***steroid*** ***receptors*** are dispensable for their
bone-protective effects, but indispensable for their effects on
reproductive organs. We have now investigated the mechanism of action of
this compound. We report that, identically to 17beta-estradiol or
dihydrotestosterone, but differently from raloxifene, estren alters the
activity of Elk-1, CCAAT enhancer binding protein-beta (C/EBPbeta), and
cyclic adenosine monophosphate-response element binding protein (CREB), or
c-Jun/c-Fos by an extranuclear action of the ER or AR, resulting in
activation of the Src/Shc/ERK pathway or downregulation of JNK,
respectively. All of these effects are non-sex specific, require only the
ligand-binding domain of the receptor, and are indispensable for the
antiapoptotic action of these ligands on osteoblastic and HeLa cells.
Moreover, administration of 17beta-estradiol or 4-estren-3alpha,17beta-
diol to ovariectomized mice induces phosphorylation of ERKs, Elk-1, and
C/EBPbeta, downregulates c-Jun, and upregulates the expression of egr-1,
an ERK/SRE target gene. Kinase-initiated regulation of commonly used
transcription factors offers a molecular explanation for the profound
skeletal effects of sex ***steroid*** ***receptor*** ligands,
including synthetic ones that are devoid of classical transcriptional
activity.

L3 ANSWER 2 OF 7 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2003:172510 BIOSIS
DOCUMENT NUMBER: PREV200300172510
TITLE: Sex steroids, ANGELS and osteoporosis.
AUTHOR(S): Moggs, Jonathan G. [Reprint Author]; Deavall, Damian G.;
Orphanides, George

CORPORATE SOURCE: Syngenta CTL, Alderley Park, Macclesfield, Cheshire, SK10 4TJ, UK
jonathan.moggs@syngenta.com
SOURCE: BioEssays, (March 2003) Vol. 25, No. 3, pp. 195-199. print.
ISSN: 0265-9247 (ISSN print).
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 2 Apr 2003
Last Updated on STN: 2 Apr 2003

L3 ANSWER 3 OF 7 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2002:369681 BIOSIS
DOCUMENT NUMBER: PREV200200369681
TITLE: Estrogen signaling in bone.
AUTHOR(S): Manolagas, Stavros C. [Reprint author]; Kousteni, Stavroula
CORPORATE SOURCE: Division of Endo/Metab and UAMS Center for Osteoporosis and
Metabolic Bone Dis, University of Arkansas for Medical
Sciences, 4301 W. Markham St., Slot 587, Little Rock, AR,
72205, USA
SOURCE: FASEB Journal, (March 22, 2002) vol. 16, No. 5, pp. A893.
print.
Meeting Info.: Annual Meeting of Professional Research
Scientists on Experimental Biology. New Orleans, Louisiana,
USA. April 20-24, 2002.
CODEN: FAJOEC. ISSN: 0892-6638.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 3 Jul 2002
Last Updated on STN: 3 Jul 2002

AB Estrogens and androgens decrease the number of bone remodeling cycles by
attenuating the birth rate of osteoclasts and osteoblasts from their
respective progenitors. These effects result, in part, from the
transcriptional regulation of genes responsible for osteoclastogenesis and
mesenchymal cell replication and/or differentiation, and are exerted
through interactions of the ligand-activated receptors with other
transcription factors. Estrogens and androgens also exert effects on the
lifespan of mature bone cells: pro-apoptotic effects on osteoclasts, but
anti-apoptotic effects on osteoblasts and osteocytes. These latter
effects stem from a heretofore unexpected function of the classical
"nuclear" sex ***steroid*** ***receptors*** outside the nucleus
and result from activation of a Src/Shc/ERK signal transduction pathway
probably operating within preassembled scaffolds, such as caveolae.
Strikingly, ER alpha or beta or the AR can transmit anti-apoptotic signals
with similar efficiency irrespective of whether the ligand is an estrogen
or an androgen. These nongenotropic, sex-nonspecific actions are mediated
by the ligand binding domain of the receptor and can be functionally
dissociated from transcriptional activity with synthetic ligands.
Moreover, synthetic ligands with potent anti-apoptotic but decreased or no
genotropic activity at all, increase BMD and bone strength,
significantly more than estrogens, without affecting the breast or the
uterus.

L3 ANSWER 4 OF 7 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2002640617 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12399595
TITLE: Reversal of bone loss in mice by nongenotropic signaling of
sex steroids.
COMMENT: Comment in: Science. 2002 Oct 25;298(5594):723-4. PubMed
ID: 12399556
Erratum in: Science. 2003 Feb 21;299(5610):1184
AUTHOR: Kousteni S; Chen J R; Bellido T; Han L; Ali A A; O'Brien C
A; Plotkin L; Fu Q; Mancino A T; Wen Y; Vertino A M; Powers
C C; Stewart S A; Ebert R; Parfitt A M; Weinstein R S;
Jilka R L; Manolagas S C
CORPORATE SOURCE: Division of Endocrinology and Metabolism, Department of
Internal Medicine, and Center for Osteoporosis and
Metabolic Bone Diseases, University of Arkansas for Medical
Sciences, Little Rock, AR 72205, USA.
CONTRACT NUMBER: KO2-AR02127 (NIAMS)
P01-AG13918 (NIA)
SOURCE: Science, (2002 Oct 25) 298 (5594) 843-6.
Journal code: 0404511. ISSN: 1095-9203.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200212
ENTRY DATE: Entered STN: 20021026
Last Updated on STN: 20030410
Entered Medline: 20021204

AB We show that sex steroids protect the adult murine skeleton through a mechanism that is distinct from that used to preserve the mass and function of reproductive organs. The classical ***genotropic*** actions of sex ***steroid*** ***receptors*** are dispensable for their bone protective effects, but essential for their effects on reproductive tissues. A synthetic ligand (4-estren-3alpha,17beta-diol) that reproduces the nongenotropic effects of sex steroids, without affecting classical transcription, increases bone mass and strength in ovariectomized females above the level of the estrogen-replete state and is at least as effective as dihydrotestosterone in orchidectomized males, without affecting reproductive organs. Such ligands merit investigation as potential therapeutic alternatives to hormone replacement for osteoporosis in both women and men [corrected].

L3 ANSWER 5 OF 7 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN

ACCESSION NUMBER: 2002:844296 SCISEARCH

THE GENUINE ARTICLE: 607KR

TITLE: Reversal of bone loss in mice by nongenotropic signaling of sex steroids

AUTHOR: Kousteni S; Chen J R; Bellido T; Han L; Ali A A; O'Brien C A; Plotkin L; Fu Q; Mancino A T; Wen Y; Vertino A M; Powers C C; Stewart S A; Ebert R; Parfitt A M; Weinstein R S; Jilka R L; Manolagas S C (Reprint)

CORPORATE SOURCE: Univ Arkansas Med Sci, Dept Internal Med, Div Endocrinol & Metab, Little Rock, AR 72205 USA (Reprint); Univ Arkansas Med Sci, Ctr Osteoporosis & Metab Bone Dis, Little Rock, AR 72205 USA; Univ Arkansas Med Sci, Dept Surg, Little Rock, AR 72205 USA; Univ Arkansas Med Sci, Dept Pathol, Little Rock, AR 72205 USA; Univ Arkansas Med Sci, Div Biometry, Little Rock, AR 72205 USA; Cent Arkansas Vet Hlth Care Syst, Little Rock, AR 72205 USA

COUNTRY OF AUTHOR: USA

SOURCE: SCIENCE, (25 OCT 2002) Vol. 298, No. 5594, pp. 843-846.
Publisher: AMER ASSOC ADVANCEMENT SCIENCE, 1200 NEW YORK AVE, NW, WASHINGTON, DC 20005 USA.
ISSN: 0036-8075.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 21

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB We show that sex steroids protect the adult murine skeleton through a mechanism that is distinct from that used to preserve the mass and function of reproductive organs. The classical ***genotropic*** actions of sex ***steroid*** ***receptors*** are dispensable for their bone protective effects, but essential for their effects on reproductive tissues. A synthetic ligand (4-estren-3alpha, 17beta-diol) that reproduces the nongenotropic effects of sex steroids, without affecting classical transcription, increases bone mass and strength in ovariectomized females above the level of the estrogen-replete state and is at least as effective as dihydrotestosterone in orchidectomized males, without affecting reproductive organs. Such ligands merit investigation as potential therapeutic alternatives to hormone replacement for osteoporosis of bone mass in both women and men.

L3 ANSWER 6 OF 7 MEDLINE on STN

DUPLICATE 3

ACCESSION NUMBER: 2002276310 MEDLINE

DOCUMENT NUMBER: PubMed ID: 12017554

TITLE: Sex steroids and bone.

AUTHOR: Manolagas S C; Kousteni S; Jilka R L

CORPORATE SOURCE: Division of Endocrinology and Metabolism, Center for Osteoporosis and Metabolic Bone Diseases, University of Arkansas for Medical Sciences, Little Rock 72205, USA..
manolagasstavros@uams.edu

CONTRACT NUMBER: P01-AG13918 (NIA)

R01 AR46823 (NIAMS)

SOURCE: Recent progress in hormone research, (2002) 57 385-409.
Ref: 100

Journal code: 0404471. ISSN: 0079-9963.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200206
ENTRY DATE: Entered STN: 20020518
Last Updated on STN: 20020605
Entered Medline: 20020604

AB The adult skeleton is periodically remodeled by temporary anatomic structures that comprise juxtaposed osteoclast and osteoblast teams and replace old bone with new. Estrogens and androgens slow the rate of bone remodeling and protect against bone loss. Conversely, loss of estrogen leads to increased rate of remodeling and tilts the balance between bone resorption and formation in favor of the former. Studies from our group during the last 10 years have elucidated that estrogens and androgens decrease the number of remodeling cycles by attenuating the birth rate of osteoclasts and osteoblasts from their respective progenitors. These effects result, in part, from the transcriptional regulation of genes responsible for osteoclastogenesis and mesenchymal cell replication and/or differentiation and are exerted through interactions of the ligand-activated receptors with other transcription factors. However, increased remodeling alone cannot explain why loss of sex steroids tilts the balance of resorption and formation in favor of the former. Estrogens and androgens also exert effects on the lifespan of mature bone cells: pro-apoptotic effects on osteoclasts but anti-apoptotic effects on osteoblasts and osteocytes. These latter effects stem from a heretofore unexpected function of the classical "nuclear" sex ***steroid*** ***receptors*** outside the nucleus and result from activation of a Src/Shc/extracellular signal-regulated kinase signal transduction pathway probably within preassembled scaffolds called caveolae. Strikingly, estrogen receptor (ER) alpha or beta or the androgen receptor can transmit anti-apoptotic signals with similar efficiency, irrespective of whether the ligand is an estrogen or an androgen. More importantly, these nongenotropic, sex-nonspecific actions are mediated by the ligand-binding domain of the receptor and can be functionally dissociated from transcriptional activity with synthetic ligands. Taken together, these lines of evidence strongly suggest that, in sex steroid deficiency, loss of transcriptional effects may be responsible for the increased osteoclastogenesis and osteoblastogenesis and thereby the increased rate of bone remodeling. Loss of nongenotropic anti-apoptotic effects on mature osteoblasts and osteocytes, in combination with an opposite effect on the lifespan of mature osteoclasts, may be responsible for the imbalance between formation and resorption and the progressive loss of bone mass and strength. Elucidation of the dual function of sex ***steroid*** ***receptors*** has important pathophysiologic and pharmacologic implications. Specifically, synthetic ligands of the ER that can evoke the nongenotropic but not the ***genotropic*** signal may be bone anabolic agents, as opposed to natural estrogens or selective estrogen receptor modulators that are antiresorptive agents. The same ligands may also circumvent the side effects associated with conventional hormone replacement therapy.

L3 ANSWER 7 OF 7 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN DUPLICATE 4
ACCESSION NUMBER: 2002-122221 [16] WPIDS
DOC. NO. CPI: C2002-037463
TITLE: Use of compound that selectively induce (non) ***genotropic*** effect for dissociating steroidal nongenotropic effect from the steroidal ***genotropic*** effect, particularly for treating e.g. bone disease or increasing bone mass.
DERWENT CLASS: B04 D16
INVENTOR(S): KOUSTENI, S; MANOLAGAS, S C
PATENT ASSIGNEE(S): (UYAR-N) UNIV ARKANSAS; (KOUS-I) KOUSTENI S; (MANO-I) MANOLAGAS S C
COUNTRY COUNT: 97
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG																	
WO 2001096605	A2	20011220	(200216)*	EN	99																	
RW:	AT	BE	CH	CY	DE	DK	EA	ES	FI	FR	GB	GH	GM	GR	IE	IT	KE	LS	LU	MC	MW	MZ
	NL	OA	PT	SD	SE	SL	SZ	TR	TZ	UG	ZW											
W:	AE	AG	AL	AM	AT	AU	AZ	BA	BB	BG	BR	BY	BZ	CA	CH	CN	CO	CR	CU	CZ	DE	DK
	DM	DZ	EC	EE	ES	FI	GB	GD	GE	GH	GM	HR	HU	ID	IL	IN	IS	JP	KE	KG	KP	KR
	KZ	LC	LK	LR	LS	LT	LU	LV	MA	MD	MG	MK	MN	MW	MX	MZ	NO	NZ	PL	PT	RO	RU
	SD	SE	SG	SI	SK	SL	TJ	TM	TR	TT	TZ	UA	UG	US	UZ	VN	YU	ZA	ZW			
AU 2001069801	A	20011224	(200227)																			
US 2002137209	A1	20020926	(200265)																			
KR 2003021172	A	20030312	(200349)																			

EP 1363946 A2 20031126 (200380) EN
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 BR 2001011688 A 20040217 (200414)
 JP 2004507232 W 20040311 (200419) 170

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001096605	A2	WO 2001-US18950	20010613
AU 2001069801	A	AU 2001-69801	20010613
US 2002137209	A1 Provisional	US 2000-211287P	20000613
	Provisional	US 2001-274373P	20010308
		US 2001-880710	20010613
KR 2003021172	A	KR 2002-717074	20021213
EP 1363946	A2	EP 2001-948338	20010613
		WO 2001-US18950	20010613
BR 2001011688	A	BR 2001-11688	20010613
		WO 2001-US18950	20010613
JP 2004507232	W	WO 2001-US18950	20010613
		JP 2002-510718	20010613

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001069801	A Based on	WO 2001096605
EP 1363946	A2 Based on	WO 2001096605
BR 2001011688	A Based on	WO 2001096605
JP 2004507232	W Based on	WO 2001096605

PRIORITY APPLN. INFO: US 2001-274373P 20010308; US
 2000-211287P 20000613; US
 2001-880710 20010613

AN 2002-122221 [16] WPIDS
 AB WO 200196605 A UPAB: 20020308

NOVELTY - Use of a compound to induce a selective effect of a receptor comprising contacting the receptor with the compound that induces:

(a) a ***genotropic*** effect without substantially inducing a nongenotropic effect; or

(b) a nongenotropic effect without substantially inducing a ***genotropic*** effect, is new.

DETAILED DESCRIPTION - The receptor consists of a progesterone receptor, a glucocorticoid receptor, a mineralcorticoid receptor, a retinoic acid receptor, vitamin D receptor, peroxisome proliferator activated protein receptor (PPAR) receptor, pregnane X receptor, bile acid receptor, thyroid receptor, farnesoid X receptor, liver X receptor, ecdysone receptor and COUP-TF (undefined) receptor.

INDEPENDENT CLAIMS are also included for the following:

(1) screening a compound that will induce a selective nongenotropic effect of a ***steroid*** ***receptor*** ;

(2) screening a compound to select a compound that induces a selective steroidal response;

(3) evaluating a compound;

(4) screening compounds for the treatment of ***steroid*** ***receptor*** related diseases or disorders;

(5) screening compounds that modulate the nongenotropic activity of a ***steroid*** ***receptor*** without modulating the ***genotropic*** activity of the ***steroid*** ***receptor*** ;

(6) a bioassay for identifying a test compound or chemical signal that activates nongenotropic receptor activity without substantially activating ***genotropic*** receptor activity;

(7) screening for ligands of ***steroid*** ***receptors*** that induce nongenotropic activity without substantially inducing ***genotropic*** activity; and

(8) a kit for measuring ***steroid*** ***receptor*** dependent nongenotropic activity comprising a container having a stable transfected cell line, where the cell line includes a steroid responsive reporter gene construct, a means for assessing the activation of nongenotropic steroid activity, and a ***steroid*** ***receptor***

ACTIVITY - Osteopathic; cardiovascular; cytostatic; antidiabetic; anticonvulsant; tranquilizer; antidepressant; antimigraine; antiaddictive; neuroprotective. Several classes of small (11-19 amino acid) peptides that bind district site of the ligand-activated estrogen receptor (ER), and can selectively block ER alpha but not ER beta -mediated transcription, and

vice versa were previously isolated. The ability of these peptides to block the anti-apoptotic effects of E2 was examined. In parallel experiments, the ability of these peptides to block transcription was examined using HeLa cells transfected with an ERE driven luciferase construct (ERE-luc) or an interleukin (IL)-6 promoter-driven luciferase (IL-6-Luc). The peptide designated alpha II, having the sequence (I), which binds to the ligand binding domain ER alpha, blocked the E2-induced increase in ERE-Luc transcription. Likewise, the peptide blocked an E2-induced decrease in the transcription of IL-6- a paradigm of transcriptional regulation mediated via protein-protein interaction between the ER and other transcription factors. Nonetheless, the alpha II peptide did not influence the anti-apoptotic effect of E2. (I)

SSLTSRDFGSWYASR

MECHANISM OF ACTION - Selective steroidal effect inducer. No supporting data is given.

USE - The compound is useful for dissociating a steroidal nongenotropic effect from the steroidal ***genotropic*** effect. The compound is particularly useful for treating bone disease or increasing bone mass. The active compounds can also be used to treat a wide variety of medical conditions, e.g. cardiovascular disease, endocrine disorders, non-insulin-dependent diabetes, proliferative and infectious diseases, neurological disorders (e.g. epilepsy, anxiety, depression, insomnia, migraine, memory impairment or drug dependency), or metabolic bone diseases (e.g. postmenopausal osteoporosis, senile osteoporosis, juvenile osteoporosis, Paget's Disease or osteogenesis imperfecta). The compound is also useful as bone anabolic agents to strengthen bone for strenuous physical activities (e.g. sports or manual labor) and to strengthen bone in persons or other hosts who do not have osteoporosis but might be subject to osteoporosis.

Dwg.0/10